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ABSTRACT

The System for Integrated Language Communications Observation (SILCO) was developed to provide descriptive information about integrated language communication instruction. Such instruction is defined as that which interrelates listening, speaking, reading, and writing through developmental sequences of skills resources and activities and provides active involvement of children in real-life experiences to facilitate application of the related communication skills that are being learned. The six categories of SILCO, each measuring a specific aspect of integration, are (1) instructional organization, (2) student communication areas, (3) resources in use, (4) skill development emphasis, (5) real-life communication qualities, and (6) integrative qualities. SILCO was field tested in three integrated and three separate-subject elementary school classrooms in three different school districts. Four trained observers recorded three 30-minute observations in each room during selected portions of reading and language arts instruction. The results of these observations were analyzed using the SILCO categories. Although the study was developmental and was conducted and field tested with a limited number of schools, the findings suggest that SILCO has many educational implications for teachers, administrators, and researchers in the field of language communication. (A copy of the observation instrument is appended.) (AEA)

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The Development of the System for Integrated Language Communications Observation

Mary Cataldi Bratton

There has been an interest in integrating the language communications skills for more than three quarters of a century. Now major decision-making bodies in state departments of education, national teachers organizations, and universities are instituting and/or adapting existing programs reflecting a belief in integrated language communications instructions, a belief which is supported by convincingly little evidence from research. There appear to be two explanations for this paucity of research. First, there is no definition of integrated language communications instruction that is consistently supported by the educational literature; in fact, there is no explicit, measurable definition of integrated language communications instruction to be found in the educational literature. Second, and following logically, the research studies addressing integrated language communications instruction cannot be compared or contrasted due to the many varying, and oftentimes, differing, definitions of integration subscribed to by the researchers. It becomes evident that although history and theory support integrated language communications instruction, consistent research does not, as will be shown.

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Purpose of the Study

The major purpose was to develop a classroom observation system to reliably identify language communications instruction in the elementary grades. Specifically, an observation system was developed to identify the degree of integrated language communications instruction taking place in selected elementary classrooms. The intention was that the development of this system would aid other researchers in further identifying and studying integrated language instructional systems' effects on students in such areas as achievement, attitude and decision-making ability, and that teachers might use the observation system in analyzing their own instructional programs.

Review of Theory and Research

The belief in a unified language base with real communication and thinking as the foundation to language development is not a newly-conceived notion. Schreiner and Tanner (1976) cite Horace Mann in 1837 as the harbinger of the teaching approach based in meaningful language experience. Mann urged educators to consider children's experiences and command of their receptive and expressive vocabularies as valuable assets upon which to build further educational experiences. Credibility was added to this view when, in 1908, Edmund Burke Huey emphasized the cognitive nature of the reading process. "The reading process had long seemed to me to mirror the process of thinking" (1908, p. vii). Psychology of reading was in its infancy when Huey stated that "the fact is that meaning is part and parcel of word -- sound and word -- utterance, as these ordinarily occur in reading and in thinking" (1908, p. 164). Thorndike (1917) followed Huey's

beliefs and also discussed the relationship of thought to reading in "Reading as Reasoning" (p. 323). He conjectured that reading involves elaborate thought processes in which eac' element of meaning must be weighed in accordance with each other element in a sentence. He also felt that reading consists of matching ideas presented in an organized fashion with the mental set or purpose for reading. Making the mental jump between the ideas supported by Huey and Thorndike to integrating all language skills follows logically. It seems reasonable that the child who demonstrates control of the thought process involved in the organization and analysis of ideas, indeed the child who can deal with language, needs to be able to draw on and build up competency in all language areas. Betts (1948) argued for the integration of the language arts and the need to involve children in meaningful listening, speaking, reading and writing activities. These views were supported by Smith (1948), Dawson (1949, 1951), and others.

In Phi Delta Kappan, Early (1976) cited Moffett as one of the influential English educators of this decade to advocate integration of the language arts. Moffett (1966) maintains that thinking, speaking, listening, reading and writing are factors in discourse. "What is common to all subjects should be the unifying force of schools," he writes, "and what is common is precisely the human capacity to symbolize first- and secondhand experience into an inner world to match against and deal with the outer world" (1968, p. 213).

Theory offers substance to the belief to integrate the teaching of the language communications skills.

The logical sequence of research stemming from theoretical considerations and leading to integrating language arts can best be illustrated

by examining (a) the research studies on the relationships between any two of the language communications areas and (b) the research studies on the interrelationships among multiple language communications areas.

The research studies addressing the relationships between the language communications areas show positive correlations when considering auding, speaking, writing (including spelling, handwriting and writing composition), reading, vocabulary and literature. Key studies include Burgdorf (1966), Bushnell (1930), Cleland and Toussaint (1962), Durrell (1969), Goodenough (1925), Kuntz (1975), Loban (1963), Loban (1976), Squire and Applebee (1968), and Strickland (1962).

The positive correlations reflected in these studies, however, do not reflect positive achievements among language communications areas when students are taught in an integrated manner. Hildreth (1948) and Artley (1950) have provided reviews of research studies which integrate more than two of the language communications areas. They supplied many references in "Research Concerning Interrelationships Among the Language Arts," but cited few studies which attempted to research integrated language communications instruction. Artley summarized the literature from 1930 to 1950 and concluded:

> It seems that the time has come to cease talking in general terms about the language arts and their integration. There is need for the inauguration of a systematic and comprehensive research program aimed toward the formulation of a vertical plan of general language development -- a program integrated with child growth and development, but withal providing for systematic and differentiated language instruction. (p. 534)

This need remains some 30 years later.

More recent research reviews have been provided by Chambers and Indrisano (1972), Walker and Schaffarzick (1974) and Boehnlein and Ritty (1977). These reviews do not cite research supporting integrated language communications instruction; in fact, they highlight the lack of systematic research studies addressing the integrated teaching of the language arts.

The research reviewed on teaching language communications in an integrated manner (key studies include Martin 1955, Winter 1957, Hahn 1966, Hahn 1967, Kendrick 1966, Kendrick & Bennett 1967, Stauffer 1966, Stauffer & Hammond 1967, and Vilscek, Morgan & Cleland 1966) is confounded because of the lack of consistent and measureable definitions of the term "integrated language arts approach."

The research emphasizes the need for a method to identify integrated language communications instruction.

Definition of Integrated Language Communications Instruction

Integrated language communications instruction, as defined in this study, is instruction that (1) interrelates listening, speaking, reading and writing through developmental sequences of skills, resources and activities, and (2) provides active involvement of children in real-life experiences to facilitate application of the related communications skills that are being learned. Even though researchers, theorists and practitioners subscribe to many different definitions of integration, one concise definition had to be adhered to in this study in order to develop a reliable and valid observation system.

Many avenues were searched, often in vain, in hopes of locating a suitable definition. A brief review of the process of defining integration

follows so that the reader can understand how the investigator reached the above definition, a definition which was integral to the development of the System for Integrated Language Communications Observation (SILCO).

The search began with an attempt to locate observation systems that had been used in classrooms to observe the language arts. The investigator thought that by locating such an observation system, a clear definition on which the observation system was developed would also be found. No such observation systems were located. A few observation systems dealt primarily with reading while including only cursory attention to the other language arts. In short, it became clear that an observation system dealing directly with the language arts and, in particular, the integration of the language arts, had yet to be developed.

Although a thorough review of the theory, literature and research on integration had been conducted, a clear, concise definition of integration could not be found. The task of defining integration came into greater focus when professional educators in the field of reading and the language arts were consulted. Countless discussions with the members of the dissertation committee contributed to the definition of integrated language communications instruction. Other educators who helped to arrive at the final definition of integration included Sister Ann Redmond and Beverly Busching, past and current Chairs, respectively, of the National Council of Teachers of English Committee on Integrating the Language Arts.

Limiting the definition to measurable criteria was then a major problem because the definition formed the base for the entire observation system. Only characteristics that could be reliably and objectively measured were included in SILCO. Individual biases held by the investigator

and each educator were sifted until one workable definition of integration was adopted. Some areas which were considered valuable to the investigator and individual educators, but not included in the definition, were factors measuring such constructs as the affective domain, transfer of knowledge from the language arts to other content areas, teachers' and students' perspectives on language communications instruction, etc. Some of these areas can already be measured by previously published and documented observation systems; therefore, it was not felt necessary to duplicate these efforts. Other areas, e.g., teacher/student perceptions of language communications instruction, were considered too difficult to be measured reliably or objectively within the scope of this study; therefore, these areas were not included in the definition.

The System for Integrated Language Communications Observation (SILCO) was developed in direct concert with the definition of integration as posited in this study.

Definition of Key Terms

1. Direct Observation Method -- a method which requires an observer to classify behaviors seen while present in the classroom.
2. Integrated Language Communications Instruction -- instruction that (1) interrelates listening, speaking, reading and writing through developmental sequences of skills, resources and activities, and (2) provides active involvement of children in real-life experiences to facilitate application of the related communication skills that are being learned.
3. Inter-observer Reliability -- the coefficient showing the degree to which two (or more) observers agree in their tally of total events

of each type when observing the same classroom at the same time (Rosenshine & Furst, 1973, p. 168).

4. Intra-observer Reliability -- the coefficient based on the degree of stability of the tallies of total events of each type made by one observer in the same classroom on separate occasions.
5. Objectivity -- the extent to which the instrument does not lend itself to change by the observer due to his own preferences, expectations, needs, feelings, and biases, and similarly, to the extent to which it may not cause the observed subjects to change (Herbert & Attridge, 1975, p. 6).
6. Separate-Subject Language Instruction -- instruction that (1) separates listening, speaking, reading and writing into specific time blocks for the development of skills, resources and activities, and (2) provides passive involvement of children in teacher-directed lessons.
7. Theory -- a set of interrelated constructs (concepts), definitions and propositions that present a systematic view of phenomena by specifying relations among variables, with the purpose of explaining and predicting the phenomena (Kerlinger, 1973, p. 9).

Procedures

The development of SILCO can best be described in two phases.

Phase 1 - Development of System

First, the characteristics of integration which theorists, researchers and practitioners agreed upon as essential were identified through three major sources of information. The first source, research and related literature, supplied many distinctive features of integrated language

communications instruction (especially, The Pennsylvania Comprehensive Reading/Communications Arts Plan (Botel, 1977), the checklist formulated by the National Council of Teachers of English Committee on Guidelines to Evaluate the English Component in Elementary School Programs (Wilkeljohann, 1976), and the curriculum guides developed and used in the research study completed by Cleland et al. (1964)). Following the listing of characteristics as they were derived from the above written sources, the investigator explored a second source, observations in classrooms, in order to add and/or delete characteristics of integration. The third source involved conferences with theorists, researchers and practitioners, and was the final step in compiling the list of characteristics particular to integrated language communications instruction.

Following the listing of characteristics of integration, six general categories were identified which outlined SILCO's basic format. These six categories were designed to provide data concerning: (1) instructional organization of the classroom; (2) frequency of student involvement in the communications areas of listening, speaking, reading, writing, and non-verbal expression; (3) kinds of resources used related to the communications areas; (4) kinds of skills developed related to the communications areas; (5) involvement of children in real-life experiences; and (6) involvement of two or more of the language arts in student communications activities, teacher/student planning, classroom environment, teacher/student evaluation, and other content areas. SILCO was subjected to eight format changes before a specific format was considered acceptable and was subsequently adopted for use in this study.

The final stage of Phase 1 involved the development of the observer training program. Observer training consisted of a 21-hour program that was completed in a three-day sequence. The investigator trained the three observers for the study and also served as the fourth observer. Audio-visual tape recordings and live observations of both integrated and separate-subject classrooms served as the basic material used during observer training. The observers represented a select group of professionals in the field of reading and language arts. Two observers held doctoral degrees in language communications. In addition, both persons had taught in public school settings and universities in the language communications areas and are well-versed in language communications instruction. The third and fourth observers were doctoral students in language communications and had experience teaching students (K-12) in public schools. All four observers are active in the field of language communications on a local as well as national level, with one observer being involved on an international level.

Phase 2 - Refinement of System

During the observer training program, SILCO was tried out with audio-visual tapes of two integrated classrooms and one separate-subject classroom. During the sessions following the viewing of each tape, the observers discussed their results. Although inter-rater reliabilities were high, with standard deviations of 1.9 and .82 (the standard deviation was not calculated for the first integrated classroom tape which was used mainly for orientation and clarification), it became obvious to the investigator that changes had to be made in SILCO in order to enhance both

reliability and validity. Because of the qualifications and extensive backgrounds of the observers in language communications, the training program served mainly as a refining process for SILCO. During the first two days of the observer training program, two additional modifications in the SILCO format were made.

On the last day of the observer training program, SILCO's final format was tried out in one integrated and one separate-subject classroom. Inter-rater reliability for the first observation showed a standard deviation of 2.06; the higher variability was expected because the observers had never recorded in an actual classroom setting using SILCO. The second observation revealed high inter-rater reliability as implied by the standard deviation of .57.

Following the conclusion of the observer training program, SILCO was ready to be implemented in three integrated and three separate-subject reading and language arts classrooms in three elementary schools. The four observers, in teams of two persons each, recorded three 30-minute observations in each room during selected portions of reading and language arts instruction. The results of the trial use of SILCO, along with reliability and validity information, will be reported in the next section. Based on the findings of the field test, SILCO was slightly modified and the final edition is included in the Appendix. The observer manual which accompanies SILCO and explains the categories, observation procedures and scoring will be available on microfiche through ERIC.

Results

The System for Integrated Language Communications Observation (SILCO) was developed to provide descriptive information about integrated language

communications instruction. The six categories of SILCO, each measuring a specific aspect of integration, are Instructional Organization, Student Communications Areas, Resources in Use, Skill Development Emphasis, Real-life Communications Qualities, and Integrative Qualities.

SILCO was put to trial use in three integrated and three separate-subject classrooms in the elementary grades in three different school districts. Four observers, in teams of two persons each, recorded three 30-minute observations in each room during selected portions of reading and language arts instruction. Although the results of these observations were analyzed in three ways: (1) each item/category, (2) each category/observation, and (3) total scores/classroom, the results, as reported in this section, are only generally addressed. This study was of a developmental nature and was conducted and field-tested with a limited number of schools; therefore, the results serve mainly to indicate the necessary refinement of the system. The reader is urged to consider all reported results within the limits of the developmental nature of this study.

Item Frequencies

Table 1 shows the summary of percentages of occurrence of items of SILCO which were most frequently observed in three integrated classrooms on three occasions. The contrasting percentages of the same items as observed in three separate-subject classrooms are also reported. These results are offered as descriptive information and not as evaluative material. SILCO does, however, highlight some distinctive items describing integration. It is interesting to note that the most frequently occurring items observed in the integrated classrooms support the definition of integration as derived in this study.

Table 1

Summary of Percentages of Occurrence of Selected Items on SILCO as Observed in Three Integrated Classrooms and Three Separate-Subject Classrooms on Three Occasions

Items	Integrated	Separate-Subject
Trade Book (use of)	66.7	33.3
Student as Resource (formal and informal)	58.4	22.2
Speaking	55.1	11.1
Writing Composition	66.7	22.2
Drama	27.8	0
Application of Mixed Language Skills	77.8	22.2
Preparing for Communication Activity	13.9	5.6
Receiving Communication Activity (student presents to an interested -- receiving -- audience)	20.4	7.4
Student Engages in Self-Expression (no audience required)	22.2	11.1
Integration of Two or More Language Arts in Communications Activity	51.9	24.1
Integration of Two or More Language Arts in Classroom Environment	81.9	58.3

Category Scores

The averaged scores for all categories were consistently higher in the integrated classrooms than in the separate-subject classrooms for all three schools. The results indicate that each category offers some valuable information in identifying integrated language communications instruction. The results also indicate, however, that no one isolated category as measured on SILCO is able to identify consistently integrated language communications instruction. Although some trends were noted in the analysis of the categories of SILCO, integrated language teaching cannot be relegated to one particular realm of the communications experience (e.g., skill emphasis, instructional organization, etc.).

Total Scores

The total scores recorded in each of the three schools and the total averaged score for all three schools combined are reported in Table 2. All three integrated classrooms scored higher totals on SILCO than the three separate-subject classrooms. Each of the integrated classrooms scored in the high 20's and low 30's, with their counterparts, the separate-subject classrooms, scoring in the mid-teens, except for school 2. This separate subject classroom in school 2 was identified throughout the study as exhibiting greater degrees of integration than the other two separate-subject classrooms in schools 1 and 3. The investigator realized that although the separate-subject classroom in school 2 was less integrated than the integrated classroom in school 2, the separate-subject classroom did exhibit a considerable degree of integration. Although these scores suggest that the investigator made a poor decision in

selecting the classroom in school 2 as an example of separate-subject instruction, the scores also support that SILCO was sensitive enough to identify integration, even though the investigator was not. Therefore, although the extreme score of the separate-subject classroom in school 2 distorts the total point-value average of the separate-subject classrooms, the score also lends credibility to the System for Integrated Language Communications Observation. The difference of 10 points in the two total scores is considered by the investigator to be a good indication that SILCO achieved its purpose, that of identifying Integrated Language Communications Instruction.

An examination of the total scores as recorded in Table 2 highlights an interesting property of integration as found in this study. The total score recorded on SILCO reflects the degree of integration in an observed classroom. It is not possible to label language instruction as either 100 percent integrated or 100 percent not integrated because of the nature of the communication process, which naturally integrates the individual language areas to the same extent. Therefore, each instructional setting, as measured on SILCO, scored somewhere on a continuum between the ends of separate-subject and integrated instruction.

Table 2

Summary of Averaged Scores Coded in Three Integrated Classrooms and Three Separate-Subject Classrooms on Three Occasions Using SILCO

	School			Schools
	1	2	3	1,2,3
Integrated Classroom	26	30	28.4	28.1
Separate-Subject Classroom	15.4	24.6	16.2	18.7
Total Score Possible	65			

Reliability

In order to calculate inter-observer reliability, the investigator correlated the scores of two observers (e.g., observer 1 and observer 2) as they recorded the behaviors in the same classroom at the same time. A correlation coefficient of .914 was computed, indicating that SILCO can be used with considerable inter-observer reliability as demonstrated in this study.

For the calculation of intra-observer reliability, the investigator correlated the scores of the same observer as each observer recorded the behaviors in the same classroom on separate occasions. A correlation coefficient of .864 was computed, indicating that SILCO has good intra-observer reliability as demonstrated in this study.

Validity

The value of SILCO is ultimately determined by its validity. Five major sources of information provided the content validation necessary to support SILCO as a valid information system.

The first step in developing a valid system was defining integrated language communications instruction since the observation system was dependent upon an accurate and measurable definition of integration.

The second source of information was a thorough review of the theory and related research on language communications instruction. This review supplied many distinctive features of integrated language communications instruction that were considered to be essential aspects of integration.

As an additional source of content validity, classrooms were visited in order to observe the kinds of activities, resources, etc. that are characteristic of integrated language communications instruction.

The fourth source of information examined before the final edition of SILCO was developed involved individual conferences with twelve professionals in the field of reading and language arts during which the investigator asked each person to list the essential characteristics of integrated language communications instruction.

Following the completion of the field trial of SILCO, the investigator slightly modified the system and pursued a fifth source for content validation. Sixteen persons, including university professors, theorists, researchers, and educators in public school settings in the United States and Canada, were invited by the investigator to critically review SILCO for content validity. Of the nine professionals who responded seven replied that SILCO did measure the characteristics of an integrated language communications classroom as defined in this study and was indeed a valid instrument.

Implications

Although integrated language communications is not a new instructional idea, the identification and organization of the many characteristics of integration into an observation system are newly developed. The implications for such a system are important to educators.

Teachers

Elementary grade teachers can use SILCO to determine the degree of integration in their classrooms. Teachers can use SILCO in several ways.

(1) The teacher can, as objectively as possible, complete the SILCO observation form immediately following a 30-minute instructional period by checking off the various items that were included in the time period for each category entry. (This recording procedure will provide a cursory view

of the degree of integration that was involved in the language instructional period.)

(2) A video tape can be recorded for a 30-minute time block and the teacher could complete the SILCO observation form at a later, self-selected time.

(3) Another teacher could observe the classroom activities for a 30-minute time period and record the observations on the SILCO form.

(4) If the teacher identifies the degree of integrated language communications instruction taking place in the classroom, he or she may make a decision as to what degree of integration is desired. If the teacher believes a greater degree of integration is warranted, then an examination of the categories on the SILCO form will provide a list of the characteristics of integration from which the teacher can begin to plan. In this way, SILCO helps to focus instruction on certain aspects of integration, e.g., student involvement as resource, activities for skill development, audience participation, etc.

Administrators

Integrated language communications instruction has particular relevance to school administrators since many aspects of integration need administrative support. School district administrators might consider the following aspects of the school plan that may help teachers increase their degree of integrated instruction as measured by the items on SILCO.

(1) Integrated language communications curriculum guides could be developed, outlining goals, objectives, supportive materials, and units of study for language instruction. Accompanying cirriculum guides, there may be included a system to record student growth in the language communications areas provided for teacher ease in record keeping. This recording

system can serve to inform parents of student growth, chart student growth from level to level, and from school to school.

(2) Larger blocks of uninterrupted time for language communications may be designed.

(3) Inservice work for the reeducation of teachers involved in the language communications may be necessary to ensure a high degree of integrated instruction. Areas of interest include the composing process, audience presentations, student discussions and communications activities.

(4) SILCO emphasizes field trips, outside resource person involvement, community involvement, and audience presentations. These kinds of activities need the support and monetary backing of school district administrators.

(5) Students may be given opportunities to function in "real-life" experiences, e.g., student councils, club periods, career days, announcers for morning classes, etc.

Family and Community

There are many ways in which parents and community members can become involved in integrated language instruction.

(1) Integrated instruction is based on characteristics termed "real life experiences," meaning that students will be involved in language activities based on real communications with someone interested in receiving the communication. Such activities may include writing articles for the local newspaper, growing flowers and plants in specified areas for community upgrading, designing posters for a local event, etc.

(2) Parents and community members could become visitors to classrooms to serve as resource persons. Such involvement will help students bridge the gap between "elementary grade learning" and "learning for the outside world of work, play and home life."

(3) After a unit of study, students may be given an opportunity to share their new learnings with someone who is interested in their newly-acquired information. Parents and community members may be the interested recipients of the communications.

Teacher Education Programs

Considerations for integrated instruction have already been addressed to teachers and administrators, those connected with their preparation should consider the most appropriate ways of providing the means to teach integrated language communications.

(1) Courses may be offered on integrated language communications instruction emphasizing the characteristics of SILCO.

(2) Courses of study may be offered in selected characteristics of SILCO which were reported as being observed consistently and frequently in integrated classrooms, e.g., incorporating the use of trade books, involving students in communication activities, assisting students in the composing process, etc.

(3) In order to develop a greater awareness of what constitutes integration, teachers could use SILCO with video tapes or in actual classrooms.

(4) Since integrated communications instruction, as measured on SILCO, records parent and community involvement in the classroom and/or

as outside resources, teachers could be given experiences in how to deal with the parent/community when discussing curricular changes, student growth in language, instructional procudures, etc.

Researchers

There are many options for future research using SILCO that will come to the mind of the creative researcher. Some avenues open to continued research using SILCO follow:

(1) The modified version of SILCO could be field-tested with a larger population.

(2) Continued research involving larger populations might provide enough data to estimate the total point-value of high, moderate and low integrated language communications instructional settings.

(3) An experimental study might be designed in an attempt to establish the relationship between the degree of integration and student achievement, student decision-making, etc.

In short, it is clear that SILCO has many educational implications for teachers, administrators, and researchers in the field of language communications.

REFERENCES

Artley, A. S. Research concerning interrelationships among the language arts. Elementary English, 1950, 27, 527-537.

Betts, E. A. Reading: Language arts approach. Educational Administration and Supervision, February 1948, 34, 65-94.

Boehnlein, M. M., & Ritty, J. M. Integration of the communication arts curriculum: A review. Language Arts, April 1977, 54 (4), 372-377.

Botel, M. The Pennsylvania comprehensive reading/communication arts plan (1977 working ed.). Harrisburg, Pennsylvania: Pennsylvania Department of Education, 1977.

Burgdorf, A. B. A study of the ability of intermediate grade children to draw inferences from selections of children's literature. Unpublished doctoral dissertation, Ball State University, 1966.

Busching, B. Personal communication, April 8, 1978.

Bushnell, P. An analytical contrast of oral with written english. Teachers College Contributions to Education (No. 451). Teachers College Bureau of Publications, 1930.

Chambers, J. R., & Indrisano, R. Boston University research in elementary school reading (1963-1969) and language arts (1927-1967). Journal of Education, 1972, 154, 3-68.

Cleland, D. L., & Toussaint, I. H. The interrelationships of reading, listening, arithmetic computation and intelligence. Reading Teacher, 1962, 15, 228-231.

Cleland, D. L., Vilscek, E., Morgan, L., & Meredith, M. The Integrated Experience Approach to Communication. Pittsburgh, Pennsylvania: University of Pittsburgh and Pittsburgh Public Schools, 1964.

Dawson, M. Individualization in the language arts. Elementary English, 1949, 26, 190-200; 238.

Dawson, M. Language learning adapted to learning pace. Elementary English, 1951, 28, 402-409.

Durrell, D. D. Listening comprehension vs. reading comprehension. Journal of Reading, 1969, 12, 455-460.

Early, M. Important research in reading and writing. Phi Delta Kappan, January 1976, 57, 298-301.

Goodenough, F. L. The reading tests of the Stanford Achievement Scale and other variables. Journal of Educational Psychology, November 1925, 16, 523-531.

Hahn, H. T. Three approaches to beginning reading instruction -- ITA, language arts, and basic readers. Reading Teacher, 1966, 19, 590-594.

Hahn, H. T. Three approaches to beginning reading instruction -- ITA, language experience, and basic readers -- extended to second grade. Reading Teacher, 1967, 20, 711-715.

Herbert, J., & Attridge, E. A guide for developers and users of observation systems and manuals. American Educational Research Journal, 1975, 12, 1-20.

Hildreth, G. H. Interrelationships among the language arts. Elementary School Journal, June 1948, 48, 538-549.

Huey, E. B. The psychology and pedagogy of reading. New York: Macmillan, 1908.

Kendrick, W. M. A comparative study of two first grade language arts programs. Reading Teacher, 1966, 20, 25-30.

Kendrick, W. M., & Bennett, C. L. A comparative study of two first grade language arts programs -- extended into second grade. Reading Teacher, 1967, 20, 747-755.

Kerlinger, F. N. Foundations of behavioral research (2nd ed.). New York: Holt, Rinehart and Winston, 1973.

Kuntz, M. H. The relationship between written syntactic attainment and reading ability in seventh grade. Unpublished doctoral dissertation, University of Pittsburgh, 1975.

Loban, W. D. The language of elementary school children. Urbana, Illinois: National Council of Teachers of English, 1963.

Loban, W. D. Language development: Kindergarten through grade twelve (Research Report No. 18). Urbana, Illinois: National Council of Teachers of English, 1976.

Martin, C. Developmental interrelationships among language variables in children of the first grade. Elementary English, 1955, 32, 167-171.

Moffett, J. A structural curriculum in english. Harvard Educational Review, Winter 1966, 36, 17-28.

Moffett, J. Teaching the universe of discourse. Boston: Houghton Mifflin, 1968.

Redmond, Sister A. Personal communication, April 7, 1978.

Rosenshine, B., & Furst, N. The use of direct observation to study teaching. In R. M. W. Travers (Ed.), Second handbook of research on teaching. Chicago: Rand McNally, 1973.

Schreiner, R., & Tanner, L. What history says about teaching reading. Reading Teacher, February 1976, 29 (5), 468-473.

Smith, D. V. Basic considerations in curriculum-making in the language arts. English Journal, March 1948, 37, 115-126.

Squire, J. R., & Applebee, R. K. High school english instruction today: The National Study of High School English Programs. Urbana, Illinois: National Council of Teachers of English, 1968.

Stauffer, R. G. Effectiveness of language arts and basic reader approaches to first grade reading instruction. Reading Teacher, 1966, 20, 18-24.

Stauffer, R. G., & Hammond, W. D. The effectiveness of language arts and basic reader approaches to first grade reading instruction -- extended into second grade. Reading Teacher, 1967, 20, 740-746.

Strickland, R. G. The language of elementary school children: Its relationship to the language of reading textbooks and the quality of the reading of selected children. Bulletin of the School of Education. Bloomington: Indiana University, 38, July 1962.

Thorndike, E. L. Reading and reasoning, a study of mistakes in paragraph reading. Journal of Educational Psychology, June 1917, 8, 323-332.

Vilscek, E., Morgan, L., & Cleland, D. Coordinating and integrating language arts instruction in first grade. Reading Teacher, 1966, 20, 31-37.

Walker, D. F., & Schaffarzick, J. Comparing curricula. Review of Educational Research, 1974, 44, 83-111.

Winkeljohann, Sr., R. (Ed.). English language arts curriculum guides K-12. United States of America: ERIC Clearinghouse on Reading and Communication Skills and National Council of Teachers of English, 1976.

Winter, C. Interrelationships among language variables in children of first and second grades. Elementary English, 1957, 34, 108-113.

Appendix

SYSTEM FOR INTEGRATED LANGUAGE COMMUNICATIONS OBSERVATION

SILCO

Developed by Mary Elizabeth Cataldi Bratton

Classroom Code _____ Teacher _____ Grade _____ School _____

Observer Code _____ Date _____ Time _____ to _____

Category / Time Block			1	2	3	4	5	6	7	8	9	10
1. INSTRUCTIONAL ORGANIZATION												
Large Group	1.1	Activity centered with skill development objectives										
Small Group/ Indiv.	1.2	Skill centered primarily										
	1.3	Independent work (self-directed)										
	1.4	Activity centered with skill development objectives										
2. RESOURCES IN USE												
Material	2.1	Textbooks, basal, workbook, worksheet, paper/pencil, boardwork										
	2.2	Trade book, reference text										
	2.3	Map, graph, chart										
	2.4	Manipulative material										
	2.5	Media										
Person/ Place	2.6	T. as resource										
	2.7	Visiting resource person										
	2.8	Field Trip as resource										
	2.9	S. as formal resource (oral, written, dramatic)										
	2.10	S. as informal resource (oral, written, dramatic										

Portions of this system reflect the Develoblock Action Plan developed by Dr. Harry Sartain, University of Pittsburgh

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Category		Time Block 1	2	3	4	5	6	7	8	9	10
3. SKILL DEVELOPMENT EMPHASIS											
Vocab.	3.1 Concept development										
	3.2 Language variations										
	3.3 Origin, history of lang.										
Listening	3.4 Following directions										
	3.5 Listening comprehension										
Speaking	3.6 Discussion										
	3.7 Mechanics										
	3.8 Informative expression										
	3.9 Creative expression										
Reading/ Study Skills	3.10 Perceptual										
	3.11 Word recognition										
	3.12 Reading comprehension										
	3.13 Reference/study skills										
	3.14 Reading rate										
Writing/ Comp.	3.15 Sentence/paragraph construction										
	3.16 Informative composition										
	3.17 Creative composition										
Writing/ Mechanics	3.18 Punctuation, capitalization										
	3.19 Spelling										
	3.20 Handwriting										
Dramatic Express.	3.21 Non-verbal expression										
	3.22 Creative drama										
Mixed	3.23 Application of mixed lang. skills										

Category	Time Block 5	10
4. REAL-LIFE COMMUNICATION ACTIVITY		
4.1 Preparing Communication		
4.1.1 T/S prepares for student-peer presentation		
4.1.2 T/S prepares for school presentation		
4.1.3 T/S prepares for family/community presentation		
4.1.4 T/S prepares for audience presentation (undetermined)		
4.2 Receiving Communication		
4.2.1 S.presents to interested peer audience		
4.2.2 S.presents to interested school audience		
4.2.3 S.presents to interested family/community audience		
4.3 Interacting Communication		
4.3.1 T/S prepares for interaction with student-peer audience		
4.3.2 T/S prepares for interaction with school audience		
4.3.3 T/S prepares for interaction with family/community audience		
4.3.4 S. interacts with peer audience		
4.3.5 S. interacts with school audience		
4.3.6 S. interacts with family/community audience		
4.3.7 S. engages in apparent self-expression (no audience presentation required)		

OBSERVER'S COMMENTS

Rate the degree of integration in this classroom: 1 2 3 4 5
Low-------High

Comments (explain rating):_____

Category	Time Block 5	10
5. INTEGRATIVE QUALITIES		
5.1 Student Communication Activities: Two or more of the language arts are involved in:		
5.1.1 Demonstrations		
5.1.2 Discussions		
5.1.3 Productions (a.v.media,drama)		
5.1.4 Simulations		
5.1.5 Manipulatives (games)		
5.1.6 Projects (paper/pencil, art,music)		
5.2 Planning: Two or more of the language arts are involved in:		
5.2.1 T&S planning		
5.2.2 S&S planning		
5.2.3 Long/short term goals		
5.3 Environment: Two or more of the language arts are involved in:		
5.3.1 T. work displayed		
5.3.2 S. work displayed		
5.3.3 Commercial work displayed		
5.3.4 T/S/commercial work displayed		
5.4 Evaluation: Two or more of the language arts are involved in:		
5.4.1 Formal T. evaluation		
5.4.2 Informal T. evaluation		
5.4.3 S. self-evaluation		
5.4.4 S. group-evaluation		
5.4.5 T&S evaluation		
5.5 Content Area Involvement: Two or more of the language arts are involved in:		
5.5.1 Other content areas		